CLAIMS

What is claimed is:

1. A multipoint lock comprising:

a locking mechanism adapted to selectively retract and extend at least one locking element relative to an elongate housing,

wherein said locking mechanism comprises an arm pivotally attached to a lock actuator and constrained to travel in a channel formed in a linkage device linked to said at least one locking element, and

wherein in a first position of said lock actuator, said arm is at a first limit of travel in said channel and is pivoted in a first angular direction with respect to said lock actuator so as to be geometrically locked at said first limit of travel.

2. The multipoint lock according to claim 1, wherein in a second position of said lock actuator, said arm is at a second limit of travel in said channel and is pivoted in a second angular direction with respect to said lock actuator so as to be geometrically locked at said second limit of travel.

3. The multipoint lock according to claim 1, wherein in said first position of said lock actuator, said at least one locking element is in an extended, locked position relative to said elongate housing.

4. The multipoint lock according to claim 2 or claim 3, wherein in said second position of said lock actuator, said at least one locking element is in a retracted, unlocked position relative to said elongate housing.

5. The multipoint lock according to any of the preceding claims, wherein said lock actuator comprises a cylinder lock in meshed engagement with a toothed rack, wherein said arm is pivotally attached to said toothed rack.

6. The multipoint lock according to any of the preceding claims, wherein said linkage device comprises a stationary linkage element with a first channel formed therein and a movable linkage element with a second channel formed therein, said movable linkage element being linked to said at least one locking element, and said arm being received in both said first and second channels.

7. A multipoint lock comprising:

a locking mechanism adapted to selectively retract and extend at least one locking element relative to an elongate housing,

wherein said locking mechanism comprises an arm pivotally attached to a lock actuator and constrained to travel in a channel formed in a linkage device linked to said at

least one locking element, wherein said channel comprises at least two terminuses at which said arm is in a locked position and said at least one locking element is at an extended position protruding out of said elongate housing, wherein said at least one locking element extends further out of said elongate housing with said arm at one of the terminuses than at another of the terminuses.

8. The multipoint lock according to claim 7, wherein the terminuses of said channel comprise an inner terminus, at least one intermediate terminus and an outer terminus, said outer terminus being closer to an end of said elongate housing than said inner terminus.

9. The multipoint lock according to claim 8, further comprising a blocking element attached to said linkage device, said blocking element comprising a first position in which said blocking element permits said arm to travel between said inner terminus and said at least one intermediate terminus, and blocks travel of said arm beyond said at least one intermediate terminus to said outer terminus.

10. The multipoint lock according to claim 9, wherein said blocking element comprises a second position in which said blocking element permits said arm to travel between said inner terminus and said outer terminus, and blocks travel of said arm between said inner terminus and said at least one intermediate terminus.

11. The multipoint lock according to any of claims 7-10, wherein said arm is geometrically locked at a position along said channel.

12. The multipoint lock according to any of claims 7-10, wherein said arm is geometrically locked at at least one of said terminuses.